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| EXAMINER | |
|---|---|
| BORLINGHAUS, JASON M | |
| **ART UNIT** | **PAPER NUMBER** |
| 3693 | |

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| 12/17/2007 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/823,376 | BUTCHER, GEORGE H. | |
| | Examiner | Art Unit | |
| | Jason M. Borlinghaus | 3693 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *20 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *15, 17 – 22 and 24 – 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15, 17 – 22 and 24 – 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 15, 17 – 22 and 24 – 33** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 15 states "a requirement that the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment date". However, Examiner was unable to locate within the specification support to enable a person skilled in the art to make such an assessment. Rather specification is directed toward establishing revenue rates, based upon financial projections concerning the underlying revenue stream, that, should projections hold true, will probably be sufficient to pay the repayment obligation.

Examiner is unsure how a bond issuer can establish revenue rates sufficient to pay the repayment obligation by the expected date, either from the specification or from the prior art, in general. At best, a bond issuer can establish revenue rates that probably will be sufficient to pay the repayment obligation by the expected date.

Claims 19 and 22 are rejected on the same grounds.

Further dependent claims are rejected based upon their dependency upon prior rejected claims.

Please examine all claims and, where required, correct appropriately.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 15, 17 – 22 and 24 – 33** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims are replete with vague and indefinite language.

Claim 15 relates to a method comprising several steps of "inputting data", "determining", "meeting the payment obligation" and "making the payment". However, claim language leaves it unclear whether the (1) bond issuer (i.e. the user) or (2) a computer system (i.e. the system) is performing the claimed steps.

Claim 15 states "wherein the requirement that the bond issuer establish revenue rates sufficient to pay the repayment obligation by the expected payment date comprises establishing a revenue requirement based on ***a lower coverage ratio than is used for purposes of either a board policy associated with the bond or a rate covenant associated with the bond***" (emphasis added). Claim language is rendered indefinite by reference to an object that is variable. See *MPEP § 2173.05(b)*. Claim language fails to indicate what constitutes a "coverage ratio [that] is used by either a board policy associated with the bond or a rate covenant associated with a bond". As

said coverage ratio could be any ratio, such claim limitation fails to define any limitations of the "revenue requirement."

Claim 24 states "wherein the coverage ratio upon which the revenue requirement is based is greater than 1 and up to 1.20". Claim 15 states "revenue requirement based on a lower coverage ratio than is used for purposes of either a board policy associated with the bond or a rate covenant associated with the bond." Based upon Claim 15, the revenue requirement is based on a (1) lower coverage ratio than a (2) board policy coverage ratio. Therefore, the revenue requirement is based upon two coverage ratios. Which ratio is Claim 24 addressing?

Dependent claims are rejected based upon their dependency upon prior rejected claims.

Please examine all claims and, where required, correct appropriately.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 15, 17 – 22 and 24 – 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Grigsby (PG Pub 2002/0016758) in view of Bachmann (US Patent 6,315,196), Gaines (Gaines, George Jr; Coleman, David S; Crawford, Linda L. Real Estate Math. Dearborn Real Estate Education. 1996. p. 107) and Official Notice.

**Regarding Claims 15, 17 – 22 and 24 – 33,** Grigsby discloses a method implemented by a programmed computer system for use in connection with a bond issued by a bond issuer, wherein the bond has associated therewith a repayment obligation and an underlying revenue stream (property taxes or sales taxes). (see abstract; para. 3) comprising:

- inputting data (repayment schedule) regarding an expected payment date (such as the individual dates on said repayment schedule) for the bond. (see para. 13);
- inputting data (maturity date) regarding a legal maturity date (maturity date) for the bond. (see para 8);
- inputting data regarding a requirement that the bond issuer establish revenue rates (projected revenue) sufficient to pay the repayment obligation (bond) by the expected payment date. (see para. 61);
- inputting data regarding the underlying revenue stream (revenue streams) associated with the bond. (see para. 61);

- determining, based at least upon the input data regarding the expected payment date and the input data regarding the underlying revenue stream, if the repayment obligation will be met by the expected payment date (such as when the obligation will not be met when the revenue stream produces "low or uncertain revenues."). (see para. 61);
- meeting the repayment obligation by the expected payment date (repayment schedule) to the extent that the determining step determines that the repayment obligation will be met by the expected payment date (such as the individual dates on said repayment schedule). (see para. 13);
- wherein the revenue stream flows from a project selected from the group consisting of an airport project (airports) and sewer project (water works). (see para. 61); and
- the bond is issued as part of a pool of bonds. (see para. 54)

Grigsby does not teach a method of making the payment of the repayment obligation at a deferral date as late as the legal maturity date to the extent that the repayment obligation is not met by the expected payment date due to the failure of the revenue stream to cover the requirements of the repayment obligation; wherein the failure of the revenue stream to cover the requirements of the repayment obligation results from a force majure event; wherein the deferral of the payment of the repayment obligation occurs upon the occurrence of a determinable event; wherein the requirement is a continuing requirement even if the repayment obligation is deferred; nor wherein the

coverage ratio upon which the revenue requirement is based is greater than 1 and up to 1.20.

Bachmann discloses a method comprising:

- deferring the payment of the repayment obligation (debt of a credit account) as late as the legal maturity date (maximum benefit duration date) to the extent that the repayment obligation (debt) is not met (unpaid) by the expected payment date (minimum payment due date) due to the failure of the revenue stream such as to cover the requirements of the repayment obligation (unable to make timely payments, such as due to unemployment). (see abstract);
- wherein the failure of the revenue stream to cover the requirements of the repayment obligation results from a force majure event (hospitalization, unemployment, disability). (see abstract);
- wherein the deferral of the payment of the repayment obligation occurs upon the occurrence of an determinable (verifiable) event. (see abstract); and
- wherein the requirement is a continuing requirement even if the repayment obligation is deferred (see col. 2, line 61 – col. 3, line 10).

Gaines discloses the utilization of coverage ratios (debt coverage rations), and coverage ratios greater than 1.0 and up to 1.20. (see p. 107).

Examiner takes ***Official Notice*** that a state revolving fund program; a repayment obligation accruing interest until a principal is repaid and adding such accrued interest

to the principal debt amount, such as compound interest; increasing interest rates for unpaid principal of the repayment obligations each year following the maturity date; and usage of a net revenue stream for debt calculations are old and well known in the art of financial management and debt servicing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Grigsby by incorporating a method of deferment for repayment of the debt obligation, as disclosed by Bachmann, if parties were unable to meet the repayment obligations under the bond due to insufficient revenue streams, providing parties an further opportunity to repay and to provide protection from adverse credit ratings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Grigsby and Bachmann by incorporating coverage ratios and coverage ratios between 1.0 and 1.20, as disclosed by Gaines, as coverage ratios are a standard and conventional metric to determine whether a borrower will be able to repay a debt obligation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Grigsby, Bachmann and Gaines by incorporating methodologies, as are old and well known in the art, as such methodologies are standard and conventional in the art of financial management and debt servicing.

**Examiner's Note**: The Examiner has cited particular columns and line numbers in the references as applied to the claims for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

***Response to Arguments***

Applicant's arguments filed 8/20/07 have been fully considered but they are not persuasive. Other rejections rescinded based upon newly amended claim language.

***§112, 1st Paragraph, Rejections***

Examiner is uncertain of the nature of the Applicant's arguments. Applicant's argument consists of reiterating the Claim language and stating that the "requirement is imposed on the bond issuer". Examiner will seek to further explain his position.

Claim 15 has a requirement that the bond issuer "establish revenue rates sufficient to pay the repayment obligation by the expected payment date." Examiner asserts that it is impossible for the bond issuer to "establish revenue rates sufficient to pay the repayment obligation by the expected payment date" prior to the repayment date, as the bond issuer would not know whether the revenue rates were sufficient until the time for repayment had commenced.

At best, the bond issuer can establish revenues rates that will ***probably be*** or ***are projected to be*** sufficient to pay the repayment obligation by the expected payment date. This is due to the uncertain nature of financial projections. At the time that the bond issuer establishes the revenue rates it would be impossible to determine whether revenue rates will be sufficient to pay the repayment obligation. As it would not be possible to determine whether the revenue rates will be sufficient to pay the repayment obligation until the repayment obligation is due, such a claim limitation can never be met.

Claim limitation language does not state that the bond issuer establish revenue rates ***projected to be*** sufficient to pay the repayment obligation by the expected payment date. Claim language does not provide such latitude. Claim language states that the revenue rates ***are*** sufficient to pay the repayment obligation.

With that being stated, whether the revenue rates are sufficient or insufficient can only be determined at the time of repayment. Therefore, whether a condition is satisfied at the beginning of a method (establishment of sufficient revenue rates) can only be determined at the conclusion of the method (repayment of bond). This creates an enablement issue.

Examiner is willing to consider the idea that the Applicant has developed some method to determine whether the revenue rates are sufficient or insufficient at the onset of the method. However, the Examiner has been unable to locate such language within the specification or within the claims.

***§112, 2nd Paragraph, Rejections***

Applicant argues that Claim 15 language of "establishing a revenue requirement based on a lower coverage ratio than is used for purposes of either a board policy associated with the bond or a rate covenant associated with the bond" is clear and definite. Examiner disagrees.

To clearly explain his position, Examiner will paraphrase the claim. Claim 15 states that a requirement will be based upon a first ratio, the first ratio being lower than a second ratio. Claim 15 does not state the upper or lower limits of this second ratio. This second ratio could be anything. Therefore, the first ratio could be anything.

Claim language is rendered indefinite by reference to an object that is variable. See *MPEP § 2173.05(b)*. Claim language fails to indicate what constitutes a "coverage ratio [that] is used by either a board policy associated with the bond or a rate covenant associated with a bond". As said coverage ratio could be any ratio, such claim limitation fails to define any limitations of the "revenue requirement."

***Coverage Ratio***

Applicant argues that "it would not necessarily have been obvious" to combine coverage ratio with the prior art and, by virtue of the term "allegedly old and well known in the art," has concerns that coverage ratio is not old and well known in the art.

Prior art concerning coverage ratios has been incorporated into the above cited rejection in order to reject newly amended Claim 24. This should dispel Applicant's concern that coverage ratios are not old and well known.

It would not ***necessarily*** have been obvious is different that it would not have been obvious. Furthermore, Applicant does not assert an argument why it would not have been obvious and Examiner is unable to respond.

***Requirement That Bond Issuer Establish Revenue Rates***

Applicant argues that prior art, neither separately nor in combination, disclose establishing "a requirement that the bond issuer establish revenue rates to pay the repayment obligation by the expected payment date." Applicant further asserts that one of the cited prior art references, Grisby, merely discloses "approving or not approving [bond] applications based, for example, on risk." Examiner disagrees.

Grigsby discloses:

> At step 2206, staff associated with the system and/or method in accordance with embodiments of the present invention may reject 2208 an application 2204 for exemplary reasons such as but not limited to an overly risky venture or poor credit history. An example of a risky venture may be a skating rink, as opposed to, for example, a safer venture like a city hall. ***The system and/or method in accordance with embodiments of the present invention may not accept applications 2204 associated with riskier municipal bonds.*** Another exemplary risky bond may be one associated with borrowing money to build a new housing subdivision in the middle of a desert. ***The system and/or method in accordance with embodiments of the present invention may reject applications 2204 from an issuer, such as a municipality, rated A or better, if the application 2204 involves a project having low or uncertain revenues, such as a project for building a swimming pool where the only revenues would come from people going to the pool to pay to swim. Exemplary applications that may be approved 2210 may include applications associated with airports and/or general obligations based on property taxes and water works where revenue streams may be more certain or consistent.*** Such exemplary applications may have established credit levels. Staff 2206 may reject 2208 if the investment, for example, is speculative or non-investment grade. (emphasis added – see para. 61).

Grigsby discloses a method in which the bond issuer (staff) determines whether the revenue rates (revenue) generated by a bond-funded project are sufficient to pay the repayment obligation at the expected payment date. As the Applicant asserts, Grigsby does assess the risk of the project; the risk that sufficient revenue will be generated to repay the obligation. Examiner is unsure how Grigsby's discussion of the financial risk involved in whether sufficient revenue will be generated to repay the obligation is not analogous to the Applicant's assessment of whether the revenue rates are sufficient to repay the obligation.

Perhaps Applicant seeks to distinguish the instant invention from Grigsby on the basis of the word "requirement." The instant invention ***requires*** sufficient revenue rates, while Grigsby merely ***prefers*** sufficient revenue rates. If such is the case, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Grigsby to make such a preference into a requirement, as bond issuers would undoubtedly want some assurances that the borrower would be able to satisfy the repayment obligation at some future repayment date.

However, as discussed previously, Examiner is unsure how this claim limitation requirement would be met, as, at best, the bond issuer is merely calculating the probability that the revenue rate would be sufficient to meet the repayment obligation at a future time.

***Official Notice***

The Examiner would like to point out that Official Notice statement(s) were used in the office action mailed on 5/18/02 to indicate that certain concept(s), technology(s) and/or methodology(s) are old and well known in the art. Per MPEP 2144.03(c), since applicant has not attempted to traverse such Official Notice statement(s), Examiner is taking the asserted common knowledge and/or well-known statement to be admitted prior art.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Borlinghaus whose telephone number is (571) 272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on (571) 272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason Borlinghaus (JMB)

November 30, 2007

12.3.07

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